



Sherlock and GCD

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Change language : English

Sherlock is stuck. He has an array A_1, A_2, \dots, A_N . He wants to know if there exists a subset, $B = \{A_{i1}, A_{i2}, \dots, A_{ik}\}$ where $1 \leq i1 < i2 < \dots < ik \leq N$, of this array which follows the property

- B is non-empty subset.
- There exists no integer $x(x > 1)$ which divides all elements of B . Note that x may or may not be an element of A .

Input Format

First line contains T , the number of testcases. Each testcase consists of N in one line. The next line contains N integers denoting the array A .

Output

Print **YES** or **NO**, if there exists any such subset or not, respectively.

Constraints

$$1 \leq T \leq 10$$

$$1 \leq N \leq 100$$

$$1 \leq A_i \leq 10^5 \forall 1 \leq i \leq N$$

Sample input

```
2
3
1 2 3
2
2 4
```

Sample output

```
YES
NO
```

Explanation

In first testcase, $S = \{1\}$, $S = \{1, 2\}$, $S = \{1, 3\}$, $S = \{2, 3\}$ and $S = \{1, 2, 3\}$ are all the possible subsets which satisfy the given condition.

In second testcase, no non-empty subset exists which satisfies the given condition.

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